

## Department of HEALTH, EDUCATION, AND WELFARE . Public Health Service

## National Institutes of Health . Bethesda 14, Md.

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REFER TO: IMH-R

May 27, 1955

Dr. R.E. Franklin Birkbeck College Crystallography Laboratory University of London 21 Torrington Square London, W.C. 1, England

Dear Rosalind:

Many thanks for your print. I recently received the proof, and returned it to the Editors. I think these make an interesting paper. Something amusing happened in that a few days ago I received a very formal letter from the Editors of NATURE complaining about the fact that I had not sent my proof in, and asking whether I had received it. I answered no, I had not received it, and a few days later it arrived with a three halfpenny stamp on it. They thought they were sending it airmail and instead it took a tramp steamer across the ocean getting here. However, it should be out pretty soon I imagine.

Schramm's photographs certainly were sensational. How was your visit to his laboratory? Did he give you some stuff to photograph?

I recently met Don Caspar, formerly of Yale University, who is now at Cal. Tech. with Jim. He, as you know, has been working on the radial distribution function of tobacco mosaic virus. In particular, he took geiger counter spectrometer measurements off of oriented gels of TMV. He then introduced some lead ion into the structure and was able to find the lead ions, and from their positions, was able to carry out a transform along the radius of the tobacco mosaic virus. Jim has probably written to you about his results. They differ somewhat from yours in that they show a large empty space in the center of TMV, then a high maximum near 25 angstroms, which presumably may be the phosphate groups in the RNA, and his transform goes out to 75 angstroms and then drops down to zero. He positions the two lead ions (two per 17,000 molecular weight protein) as residing one near the RNA core and the other on the periphery of the tobacco mosaic rod. His data looked reasonably good. I hope that he will send me a preliminary writeup of his material. He said he would, and if he does, I will send it on to you.

Dr. R.E. Franklin - 5/27/55

My present plans are to leave here sometime around the end of June, and arrive in London perhaps about the beginning of July. I hope to stay about six weeks. What are your plans for the summer? Does my visiting at that time seriously incovenience you?

When I have made my plans more definite, I will let you know.

With best regards,

Yours sincerely,

Alexander Rich, M.D.